Consequences of potential alterations to specific MPAs:

Overall summary

The sum of all potential changes would lead to Package P failing to meet the scientific guidelines. Individual changes may, however, be possible while still meeting the guidelines to a lesser degree.

Habitats:

- With respect to the goals of the MLPA, only the option for Pt Sur has a potentially positive impact to the Package P array of MPAs
- The net effect of all other options is a decline in protection with respect to ecosystem, habitat, and network goals

Size and spacing:

- The number of MPAs in the preferred size range would be reduced from 5 to 3 (versus 7 for packages 2R and 3R). This should greatly reduce the effectiveness of the network thus reducing potential benefits to both consumptive and non-consumptive users.
- Maximum spacing would greatly exceed SAT guidelines for 2 key habitats (kelp forest and shallow water rock), and most habitats would have substantially larger maximum gaps.

1. Point Sur

Option 1 (change to 3R configuration)

- Provides increase in amount of SMR protection of nearshore habitats.

Summary:

- Increases shallow (0-30 m depth) rocky habitat in SMR
- Increases average kelp habitat in SMR
- Increases rocky intertidal habitat in SMR
- Increases moderate depth (30 – 100 m) rocky habitat in SMCA
- Provides a larger contiguous rocky reef habitat from onshore to offshore than original package P
- Decreases moderate depth (30 – 100 m) rocky reef habitat in SMR
- Decreases deep (100 – 200 m depth) rocky reef habitat in SMCA
- Decreases moderate 30-100 m depth) soft bottom habitat in both SMR and SMCA

	SMR (sq mi)			SMCA (sq mi)		
Habitat	P-10	Opt-1 (3R)	% Change	P-10	Opt-1 (3R)	% Change
Rock (0-30)	2.02	3.38	+ 67%	na	na	na
(30-100)	2.51	1.65	- 34%	1.38	1.95	+ 41%
(100-200)	0	0	0%	0.16	0	- 100%
Average Kelp	0.52	0.84	+ 62%	na	Na	na

Rocky Intertidal	2.64	3.66	+ 30%	na	na	na
Beach	4.01	5.54	+ 38%	na	na	na

2. Piedras Blancas

Option 1 (lowering of northern boundary)

- Option 1 greatly reduces protection of all nearshore habitats and compromises network function for key shallow water rocky reefs.

Option 2 (lowering of northern boundary and raising of southern boundary)

- Option 2 does not meet SAT guidelines.

Summary:

- Option 1 decreases rocky intertidal, shallow (0-30 m) rock and average kelp habitats in SMR by 35-50%, and rock habitats in SMCA (30-100 m) by 30%.
- Option 1 reduces MPA size from the SAT preferred range to the SAT minimum range
- Option 1 would create network spacing gaps that exceed SAT guidelines for shallow water rock habitats
- Option 2 does not meet SAT minimum size guideline for alongshore span (1.9 mi vs. 3 mi)
- Option 2 does not meet SAT minimum size guideline for MPA area
- Option 2 would create network spacing gaps that exceed SAT guidelines for shallow water rock habitats
- Option 2 decreases rocky intertidal, shallow rock (0-30 m) and average kelp habitats in SMR by 76-100%, and rock habitats in SMCA (30-100 m) by 30%.

	SMR (sq mi)					SMCA (sq mi)				
Habitat	P-10	Opt-1	% Change	Opt-2	% Change	P-10	Opt-1	% Change	Opt-2	% Change
Rock (0-30)	1.6	0.87	- 46%	0.26	- 84%	na	na	na	na	na
(30-100)	0.15	0.15	0 %	0	- 100%	0.56	0.39	- 30%	0.39	- 30%
Average Kelp	0.5	0.25	- 50%	0.10	- 80%	na	na	na	na	na
Rocky Intertidal	5.83	3.78	- 35%	1.38	- 76%	na	na	na	na	na

3. Cambria

Option 1 (complete removal of Cambria SMR)

- Option 1 would result in region-wide loss of representative habitats at high levels of protection and would compromise network spacing for key shallow water habitats.

Option 2 (reduction of SMR)

- Option 2 does not meet SAT guidelines.

Option 3 (reduction of SMR and/or addition of SMP)

- Option 3 does not change conservation value of area as state marine park would allow all recreational take of finfish thus limiting the benefits of an undisturbed population structure.

Summary:

- Option 1 would eliminate protection of habitats in this part of the coast.
- Option 1 would create network spacing gaps that greatly exceed SAT guidelines for kelp forest and shallow water rock habitats
- Option 2 does not meet SAT minimum size guidelines for alongshore span (2.2 vs 3 mi)
- Option 2 leads to 21 – 26%% reduction in all nearshore habitats in SMR

	SMR (sq mi)				
Habitat	P-10	Opt-1	% Change	Opt-2	% Change
Rock (0-30)	0.86	0	100%	0.68	- 21%
(30-100)	0.02	0	100%	0.02	0%
Average Kelp	0.33	0	100%	0.25	- 24%
Rocky Intertidal	3.52	0	100%	0.87	- 26%
Beach	1.17	0	100%	2.61	- 26%

4. Point Buchon

Option 1 (Constriction of upper and lower boundary of SMR and SMCA)

- Option 1 does not meet SAT guidelines.

Summary:

- Option 1 does not meet SAT minimum size guidelines for alongshore span (2 mi vs. 3 mi), although while the Diablo Canyon security zone is in place, the alongshore span is effectively increased and meets the guideline.
- Option 1 reduces MPA size from the SAT preferred range to the SAT minimum range
- Decrease in shallow and moderate depth rock, kelp, and rocky intertidal and beach habitat in SMR by 25 – 63%.
- Increase of 23% of rock habitat 30-100 m deep in SMCA

	SMR (sq mi)			SMCA (sq mi)		
Habitat	P-10	Opt-1	% Change	P-10	Opt-1	% Change
Rock (0-30)	0.6	0.42	- 30%	na	na	na
(30-100)	0.75	0.28	- 63%	0.69	0.85	+ 23%
(100-200)	na	na	na	0.02	0.02	0%
Average Kelp	0.2	0.15	- 25%	na	na	na
Rocky Intertidal	2.74	2.03	- 26%	na	na	na
Beach	1.46	0.76	- 48%	na	na	na

4. Vandenberg

Option 1 (lesser lowering of northern boundary)
Option 2 (greater lowering of northern boundary)

- Both options create MPAs primarily for sand habitat and result in region-wide loss of representative habitats at high levels of protection.
- Both options compromise network function for key shallow water habitats.

Summary:

- Both options decrease (-13-100%) shallow (0-30 m) and moderate (30-100 m) depth rock habitat especially in moderate depths (67-100% decrease) and especially for option 2.
- Option 2 completely eliminates SMR protection for rock habitat 30-100 m and for kelp habitat.

	SMR (sq mi)				
Habitat	P-10	Opt-1	% Change	Opt-2	% Change
Rock (0-30)	3.27	2.83	- 13%	1.07	- 67%
(30-100)	0.25	0.10	- 60%	0	- 100%
Average Kelp	0.02	0.02	0%	0	- 100%
Rocky Intertidal	9.55	8.9	- 7%%	6.58	- 31%